

ABSTRACT OF THE DISCLOSURE

In a planetary gear unit 120, a planetary carrier 123 is linked with an engine 150, a sun gear 121 with a motor 130, and a ring gear 122 with a motor 140 and an axle 116. A clutch 160 is disposed between the planetary gear unit 120 and the motor 140 to connect and disconnect the planetary gear unit 120 with and from the motor 140. A brake 162 is also provided to constrain the ring gear 122 in a released position of the clutch 160. The state of coupling the clutch 160 attains the structure of a parallel hybrid vehicle. The state of releasing the clutch 160 and activating the brake 162 to constrain the ring gear 122 attains the structure of a series hybrid vehicle. The technique of the present invention changes over the drive mode according to the driving state of the hybrid vehicle, thus ensuring an efficient drive that takes advantage of the characteristics of the respective drive modes.